GEOGRAPHIC NEWS BULLETIN

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THE NATIONAL GEOGRAPHIC SOCIETY

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General Headquarters, Washington, D. C.

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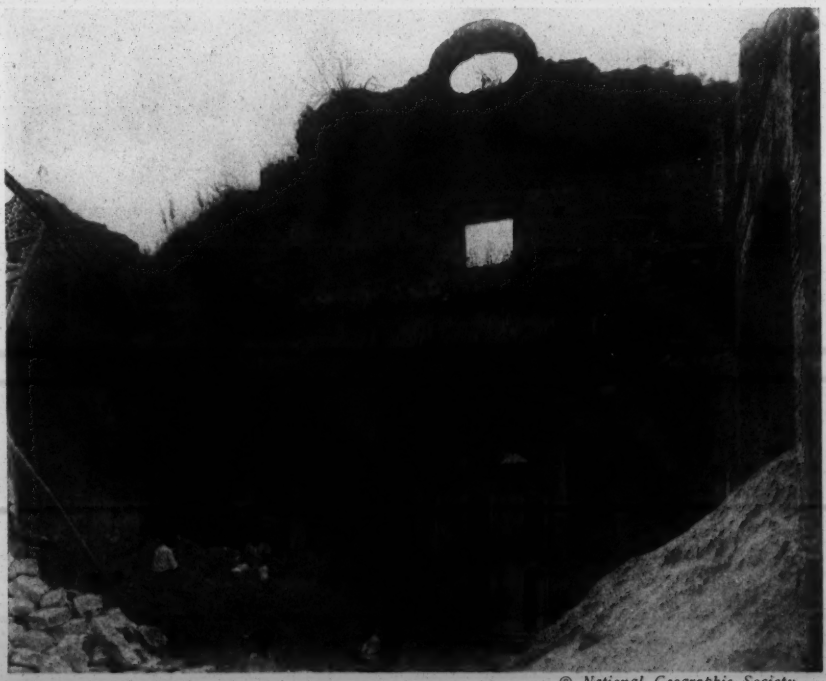

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THE "FLAT ARCH" AT THE ENTRANCE TO THE RUINED CHURCH OF SAN DOMINGO: PANAMA CITY

The fact that this remarkable arch has stood for more than a century was taken to be a good answer to those who feared to build the locks at the Panama Canal lest earthquakes demolish them.

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Jidda: Gateway to Mystic Mecca

THE former Sultan of Turkey, Mohammed VI, who was deposed by the Turkish Nationalists and removed by a British warship to Malta, recently landed at Jidda, on his way to Mecca. There, in the holy city of his faith, he has been given asylum by the King of the Hejaz.

Frederick Simpich, in a communication to the National Geographic Society, writes of Jidda and Mecca as follows:

"The port of Jidda, Red Sea gateway to hidden Mecca, sprawls over hot, treeless hills—whitewashed, sinister, and forbidding, as if loath to give up her long guardianship of Arabia's secrets and isolation.

"A cable's length off shore our pilgrim ship swung at anchor blistering and silent, for cholera had come among the white-robed, praying pilgrims, and the Tigris was quarantined against this dread disease. For days we rolled on the oily swells of the Red Sea, waiting for the hateful yellow flag to be pulled down.

"Idling at the foul, sticky rail, I gazed down into the clear, deep waters, seeking in whimsical fancy to make out rusty old chariot wheels or the white bones of men and horses, relics of Pharaoh's hosts engulfed so long ago.

"Here in Jidda the Arabs will show you a long stone tomb, shaped like an airship's hangar; here, they claim, Eve is buried. Adam and Eve were big people, the Arabs say; Eve was so tall she could hold a grown lion in her lap, and stroke it as we stroke a kitten. When you note the size of her tomb, you can readily believe she was rather a stalwart dame.

"Forty-five miles east of Jidda, poured into the canyons and valleys of a mass of rough hills, lies Mecca itself, the famous holy city of Islam. In spite of its vast political and religious importance, the town is mean and small, with less than 100,000 Mohammedan souls. It has almost no trade, and it manufactures nothing. But it has the largest tourist traffic of any city on earth, and, like other tourist towns, it lives on the traveler.

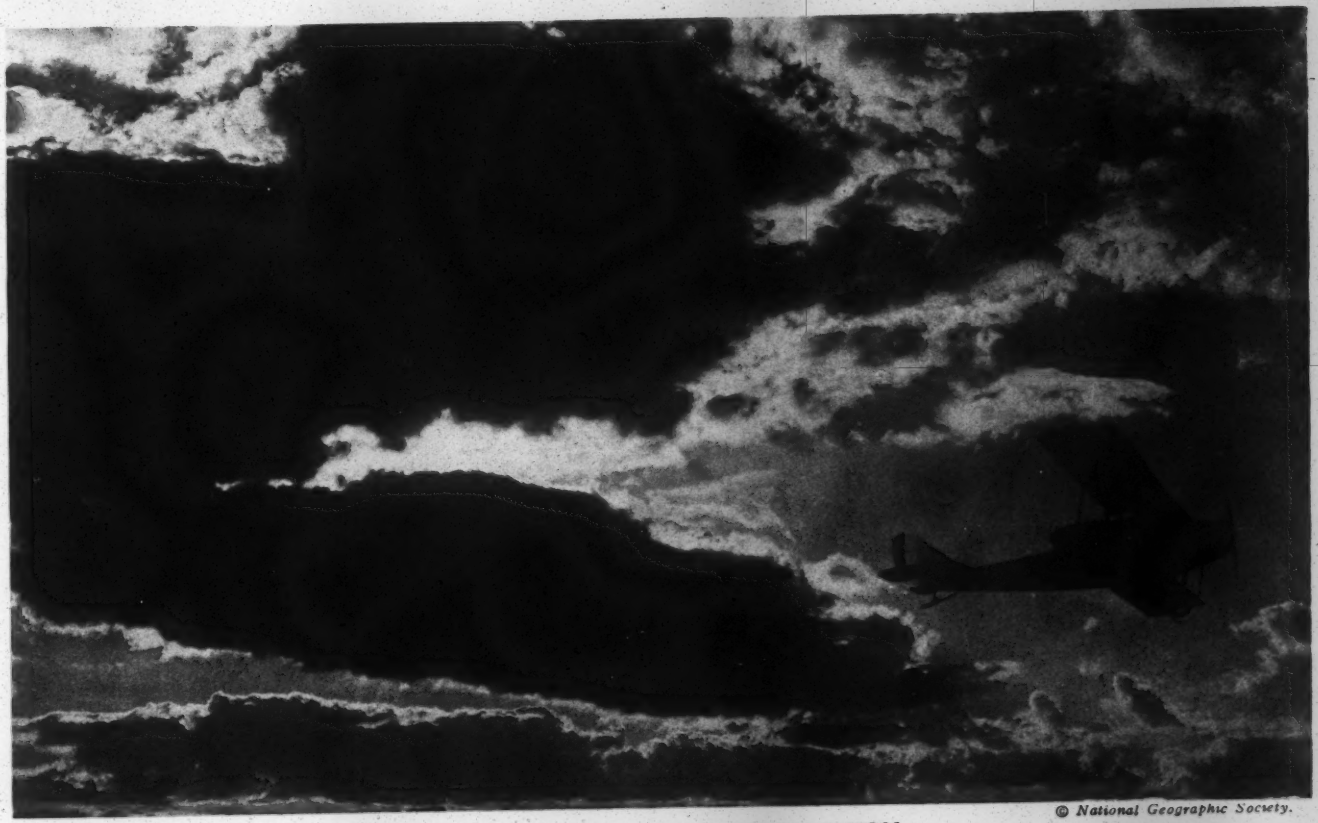
"The Meccans peddle food and clothing to the pilgrims, rent them houses, act as their guides, make contracts for transporting pilgrims by land and sea, and in a hundred other ways they craftily exploit (to their own personal benefit) the vast benefactions that flow to the holy city. Even temporary marriages are arranged for the visiting pilgrims.

"And the country Arabs, or Bedouins, likewise thrive on the bounty of the pilgrim, either by outright robbery and pillage of the caravans or by imposing taxes, for 'protection,' on those who pass through their tribal regions.

"But even among the Bedouins the Meccans have a bad reputation. They say the worst birth certificate an Arab can have is the Tashrift, three parallel gashes, distinguishing the bearer as one born in Mecca.

"Ever since Mohammed purged the Ka'aba of early Arab idols and made it the chief sanctuary of Islam, adapting this heathen temple to Moslem worship by the fiction that Gabriel threw the black stone down from heaven to Abraham, 'the unspeakable vices of Mecca have been a scandal to all Islam and a constant source of wonder to pious pilgrims.'

"All we know of Mecca, as yet, has come mostly from Moslem writers and



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WILL AIRPLANES ATTACK AND DEMOLISH CLOUDS?

The dissipation of fog by the scattering of electrified sand from airplanes raises a question as to the extension of the method.

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Panama: Where East Seems West

ALONG the Pacific coast of the Republic of Panama the great battleships of the United States and their smaller associates have been playing a game of hide-and-seek, mimicking the grimmer game of war. They were sailing waters and "attacking" land rich in history.

The Isthmus of Panama, which now almost exactly corresponds to the Republic of Panama, has probably had as many thrills to the square foot as any other section of the earth of similar size. They have ranged from the ignoble to the noble, from the drunken debaucheries of bloodthirsty pirates as they sacked the prosperous cities of the country, to the feelings of Balboa as he stood, the first white man to view the waters of the Pacific, and those of the American engineers who saw the completion there of the world's greatest engineering feat. And through it all large tracts of the little country have remained much as they were when Columbus first set foot there in 1502, and happy to find a part of a real continent after seemingly interminable islands, named it "Terra Firme."

Panama Springs Geographic Joke

Panama perpetrates one of the greatest of geographic jokes on those who visit it. It very convincingly makes east west.

From Panama City the sun rises out of the Pacific, which to most American minds is the proper place only for setting suns. And he who sails through the canal from the Atlantic to the Pacific travels not from east to west as he naturally expects to do, but from west to east, or more accurately, from northwest to southeast.

One gets the impression, as one writer has phrased it, that "there is something crooked about this." The crookedness is found to be in the isthmus, which runs predominantly east and west instead of north and south, and in addition makes a double curve like the letter S, so that at one place the Atlantic waters are actually west of those of the Pacific.

It may seem a far cry from the lay of the land at Panama to the South Sea, but because of the east and west trend of the isthmus the popular name for that huge, island-dotted ocean has largely taken the place of the more nearly correct, "South Pacific."

When Balboa stood on an isthmian mountain crest in 1513 and discovered the great ocean stretching off to the southward he naturally named it "El Mar del Sur"—the South Sea. A few days later when he had won his way to the newly discovered ocean he waded into it and made the singularly modest claims for the King of Spain to sovereignty over the sea and all lands and islands bordering on it, "from pole to pole, till judgment day."

Stream of Gold From Peru

Since a few years after Balboa's discovery the Isthmus of Panama—for a long time called Darien—has been the gateway for commerce between the East and the West and between Pacific South America and Europe. The old city of Panama was founded as the entry port on the Pacific side in 1518, more than a

photographers, and from the meager reports of the few Christians like Burton, Heronje, and others, who braved the dangers of discovery and succeeded in visiting the hidden city. But, with the rise of the new nation, Mecca and Medina will go on the revised map as places to which Christians may travel, if they wish, either as merchants or tourists.

"It is not likely, judging from its location, climate, and surroundings, that many non-Moslem globe trotters will get the Mecca habit; but its days of complete isolation probably are gone forever."

Bulletin No. 1, March 26, 1923.

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A NEGRO FAMILY OUTSIDE THE WALLS OF JIDDA

Africa is close, and its people, brought in for ages as slaves, have become an important element in the Hejaz population. They are, of course, Mohammedans—only the Jews seem able to live in the very heart of Islam and yet retain their religion.

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The Where and Why of Thunderstorms

DISSIPATION of fog by sprinkling electrified sand from airplanes, and talk of the possibility of inducing rain by a similar method may furnish still another job for our already ubiquitous electric current—"man-made lightning." Experiments to that end turn attention to the ways of nature herself in these matters.

Unknown Near Poles

Our own experiences in the temperate zone and the literature with which we are most familiar—practically all of it written in the temperate zone—combine to give us the impression that thunder and lightning are more or less world-wide phenomena. Zeus began forging his thunderbolts and scattering them about the Mediterranean region with the dawn of time, and farther north in Europe Thor was occupied with the same pastime. "Donner" and "blitzen" even figure in our nursery rhymes.

But it does not follow that these phenomena are known throughout the world. The brilliant flash of lightning and the crackle and rumble of thunder would be as impossible of conception by many Eskimos as would "solid water" by equatorial savages.

The humid regions of the tropics constitute the real home of thunder. In some regions in the torrid zone there are as many as 200 days in the year on which thunderstorms occur. But these disturbances are frequent enough in the semi-tropical areas and in the temperate zones, and it is in the latter, in fact, that the greatest damage results from lightning.

In general the frequency of thunderstorms decreases as one goes north, until within the Arctic and Antarctic circles they seldom occur. When Katmai volcano, on the Alaskan peninsula, erupted in 1912 some of the adult natives of the vicinity were more terrified at the lightning and thunder that accompanied the dust clouds than at the possibility of being buried by ash, because they had nothing in their lifelong experience by which to judge the blinding and deafening noise from the skies.

Blind Spots in U. S.

There are virtual "blind spots" for thunder and lightning even in the United States, particularly along the Pacific coast. The extremes are Tampa, Florida, with its average of more than 90 thunderstorms a year, and San Francisco, with an average of less than one such storm a year. At no place along the Pacific coast do more than three or four thunderstorms occur per year.

Though lightning, perhaps next to the rising sun and the wind, must have been one of the earliest manifestations of nature to attract man, it was not until recently that an apparently satisfactory explanation was evolved in regard to its origin and what takes place during the flash. It was long held that lightning was the discharge of "normal atmospheric electricity" which exists in the air, becomes concentrated in clouds, and finally reaches such a high potential that it breaks a path to a neighboring cloud of opposite potential, or to the earth. Some recent

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hundred years before the Pilgrims landed in Massachusetts. Portobello, known to all readers of pirate tales, was the Atlantic port, and between them was constructed a paved trail. At the height of Spanish colonial power gold and silver from Peru were carted across this old trail like cord wood.

Such great wealth was an irresistible attraction to the buccaneers who infested the Caribbean. Time after time they swooped down on the isthmus from their strange island commonwealth near Haiti. Old Panama was entirely destroyed in 1671 by such an expedition under the leadership of the notorious Henry Morgan, later Sir Henry. On other occasions, Portobello, in spite of its formidable fortifications, was taken, and even occupied by the pirates as a base for months at a time. One of the old forts of Portobello, useless in the village to which the one-time opulent port has shrunk, was demolished during the building of the Panama Canal and its stones crushed to make material for concrete.

Panama Isolated Politically

Politically the Republic of Panama is a thing apart. It was formerly a state of the Republic of Colombia, in South America, but gained its independence in 1903. It has been left out of the unions of Central America that have been formed from time to time. This isolation is no doubt due in large part to the existence of the canal under United States ownership extending through Panama territory.

The little republic is shaped like a section of waving ribbon or a squirming snake. It is 31 miles across at its narrowest point and not much over 50 miles wide throughout most of its 450 miles of length. It has an area approximately equal to that of South Carolina. The greater part of the Atlantic side of the isthmus is occupied by jungles. The population is between a third and a half of a million. Some pure-blooded Indians occupy the central mountains and a part of the Atlantic coast toward South America. There is a large negro element in the population. The remainder are of Spanish extraction and of mixed blood. The majority of the more civilized and progressive inhabitants live on the Pacific side of the isthmus and are concentrated noticeably in the west end toward the Costa Rican border. Since the cession of the Canal Zone to the United States, Panama has had no army but has depended solely on its national police force.

Bulletin No. 2, March 26, 1923.

Form for Renewal of Bulletin Requests

Many requests for the Geographic News Bulletin were made for the year ending with a March, 1923, issue. If you desire the Bulletins continued kindly notify The Society promptly. The attached form may be used:

School Service Department
National Geographic Society
Washington, D. C.

Kindly send ..... copies of the Geographic News Bulletin for the school year beginning with the issue of February 12, for class room use, to

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Patagonia: A "Desert" That Is Blossoming

PATAGONIA long has been ticketed in many minds with Kamchatka and Timbuktu as representing the ends of the earth. Recently it has had its supposed strangeness further emphasized by the reported discovery there of a plesiosaurus, a huge lizard-like creature thought to have been extinct for many thousands of years, and by the finding of what is thought to be the world's oldest human relic, a skull possibly a million years old.

If the ideas of Patagonia generally held are a bit hazy there is good reason for it, for the region did not really begin to be well known until a generation ago, and even now there are sizable areas that have not been explored. The first fact that needs to be understood about Patagonia is that it is not an official division. Like "the Northwest Territory" of the early days of the United States, it has been carved up into states or provinces. But even if the name, Patagonia, has been pushed off many official papers, it has clung in popular usage and probably will remain for a long time.

Twice Area of California

The extreme southern tip of Argentina would probably be given as the offhand location of Patagonia in a large number of cases. But the region given this designation really covers one-half the north-and-south extension of the Republic, stretching from central Argentina for more than 1,000 miles south almost to the tip of the continent. Its width varies from about 150 miles in the south to 450 in the north, and its area is nearly twice that of California, our second largest State.

An idea of the physical condition and economic development of this vast area can be conveyed best perhaps by the statement that Patagonia is to Argentina what the great West and Southwest were to the United States just after the Civil War. There was the myth of the "great American desert" then—a dry, cheerless country that could never be reclaimed. But with the extension of railroads, farms, ranches and irrigation systems this North American "desert" is disappearing.

Just so Patagonia was labeled a desert for many years; but farms and irrigation works have already rescued great enclaves from the region and millions of head of cattle and a score of million sheep are supported today on only portions of the area. After a few thousand more miles of railway shall have been constructed, a few hundred steam shovels shall have been set to work, and a few million yards of wire fencing shall have been stretched in place, the Patagonian "desert" will probably go the way of its North American precursor.

Darwin Gave Region Black Eye

It is an interesting fact that the statements of a careful scientist—Charles Darwin—did much to give Patagonia an undeservedly bad reputation before the world. Darwin studied chiefly the forbidding desert coast of the lower portion of the country, and his discouraging report was interpreted as applying to the

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laboratory experiments seem to show that the mysterious ion plays a major role in the production of lightning.

According to this theory air, rising rapidly through falling rain, breaks the drops into small particles, a process which sets free an excess of negative ions. These are carried aloft with the finest spray while the positive ions are left below. Eventually the accumulated negative charge in the upper portion of the clouds breaks its way to the positively charged lower cloud or the tension of positive electricity on the lower clouds breaks a path to the earth.

Thought Thunder Was Bumping Clouds

There have been various theories to account for thunder, the audible aspect of lightning. To the Scandinavians it was the pounding of Thor's hammer; to the Hindus, the clatter of celestial horses' hoofs on "the hard pavement of the sky." Not many decades ago the explanation was made seriously in the West that thunder arose from the bumping together of the clouds. It is now explained as caused by the violent heating of the atmosphere along the path of lightning bringing about a sudden expansion that is practically an explosion.

Similarly, it is believed to be the sudden heating caused by the discharge which disrupts trees and other objects struck by lightning. It is thought that the sap in growing trees and even the slight amount of moisture in seasoned wood is turned instantly into steam or perhaps is broken up into oxygen and hydrogen.

If lightning strikes a large expanse of metal well connected with the ground little damage results. Steel-framed skyscrapers in New York have been struck repeatedly, but the electrical charges usually run harmlessly down the metal walls into the earth.

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THE BRIDGE CROSSED BY MORGAN ON HIS WAY TO SACK OLD PANAMA IN 1671

The visitor to the ruins often crosses this archway, which every night whispers to the waters of the famed South Sea that ebb and flow beneath it, of the days when mules carrying the wealth of an empire passed over it.

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Isle of Pines: A Tropical Yankeeland

THE ISLE of Pines, in regard to which a treaty with Cuba recently was taken from a State Department pigeon-hole where it had lain since the Spanish-American War, and submitted to the Senate, probably is not a familiar name to the average American. But the chances are that the island, for all that, has contributed delightful dishes to his mid-winter breakfasts, luncheons, and dinners.

From the Isle of Pines, as far south of Havana as Havana is south of Key West come some of the earliest of the fresh vegetables and some of the most luscious of the grapefruits that reach snow-bound American markets.

Most American Community Under Foreign Flag

This pine-clad island of the tropics, while probably not well known to the majority of stay-at-home Americans, is either permanent or temporary home to some thousands of Americans who have more than the average share of wanderlust in their make-up, and who have made and are making over a unique region formerly almost wholly neglected. The island belongs to Cuba and is governed by that republic; but it constitutes probably the most American community under any foreign flag.

The island was shunned by ordinary folk during the early centuries after its discovery by Columbus, because it became a rendezvous for the notorious Caribbean pirates. Later under the Spanish rule of Cuba, it led a sleepy, isolated existence and was used for what the Spaniards called "convict settlements." But the "convicts" were, in the main, political prisoners who had plotted the overthrow of Spanish rule in Cuba.

During American control of Cuba after the Spanish-American War, Americans saw the unrealized possibilities of this fertile island of equable climate, and began its development through the planting of citrus orchards. Other Americans followed and other industries were developed. Now the one-time pirate island is a "Little America." Ninety-five per cent of its surface is owned by individual Americans and over half the population is English-speaking. American churches, schools, and lodge-rooms dot the country-side; and automobiles spinning over excellent roads, and farm machinery, clanging away in field and orchard, supply an atmosphere that might be that of Indiana or California.

Lowest Tropic Pines

The island gets its name from its forests of pine which are said to exist there at a lower altitude than anywhere else in the tropics. But with these trees of a more northern region, grow palms and oranges, mahogany and ebony.

The Isle of Pines, almost a quarter the size of Porto Rico, has only about one-fortieth the density of population of that crowded island. About 7,000 persons were shown to be resident there by the latest census. But during the cold period in the United States, when tourists go south and winter homes are occupied, the population is considerably increased.

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entire country. For decades no one thought it worth while even to explore the hinterland.

It is westward beyond the semi-arid pampas or plains that the most interesting and least thoroughly known portions of Patagonia are found. Along the eastern slopes of the Andes and in some of the valleys between its parallel ranges is a scenic and climatic paradise. Grassy meadows and forest-clad slopes alternate with sheer cliffs and towering, snow-mantled peaks; and scattered everywhere are innumerable sparkling streams and sky-blue lakes. This is, in fact, one of the most extensive and most wonderful lake regions in the world. A number of these bodies of water are comparable in size to Lake Champlain. Only a relatively few of the smaller lakes have been named and some have been numbered. Many of them, however, have not been explored. It was in this inter-mountain lake region that strange creatures were reported to have been seen.

An Argentina National Park

One of the best known of the Andean Lakes of Argentina is Nahuel Huapi. This lake is in the edge of Patagonia but is still nearly 1,000 miles north of Cape Horn. The area of this many-branched body of water is probably in the neighborhood of 250 square miles. Its latitude in the southern hemisphere almost exactly corresponds to that in the northern hemisphere of the Rocky Mountain National Park, just north of Denver; and it is about 800 miles from Buenos Aires, the same distance as that which separates Denver from Chicago. Much territory about the lake has been set aside by the government, and the region will be made into one of Argentina's principal national playgrounds. It is planned to harness the outlet river and to build at the eastern margin of the lake, in a region of delightful climate, a great industrial city.

Bulletin No. 4, March 26, 1923.

Note to Teachers

References to articles and pictures in The National Geographic Magazine concerning subjects treated in this Bulletin are given because many teachers wish to employ them for further study or for project and problem assignments. The following is only a partial bibliography extracted from "The Cumulative Index of The National Geographic Magazine" (1899-1922, inclusive). A limited supply of some numbers may be ordered from The Society's offices at the prices named. Those numbers marked with an asterisk (*) are out of print. Bound volumes of The Geographic may be consulted in any public library and in school libraries.

Jidda: Mecca the Mystic: A New Kingdom within Arabia. By L. M. Zwemer. Vol. XXXII, pp. 157-172, 13 ills., Aug., 1917. 50c.

Rise of the New Arab Nation, The. By Frederick Simpich. Vol. XXXVI, pp. 369-393, 17 ills., 1 page map, Nov., 1919. 50c.

Panama: Haunts of the Caribbean Corsairs, The: The West Indies a Geographic Background for the Most Adventurous Episodes in the History of the Western Hemisphere. By Nell Ray Clarke. Vol. XLI, pp. 147-187, 27 ills., Feb., 1922. (*)

Redeeming The Tropics. By William Joseph Showalter. Vol. XXV, pp. 344-364, 13 ills., March, 1914. 50c.

Our Heralds of Storm and Flood. By Gilbert H. Grosvenor. Vol. XVIII, pp. 586-601, 15 ills., 1 chart, Sept., 1907. (*)

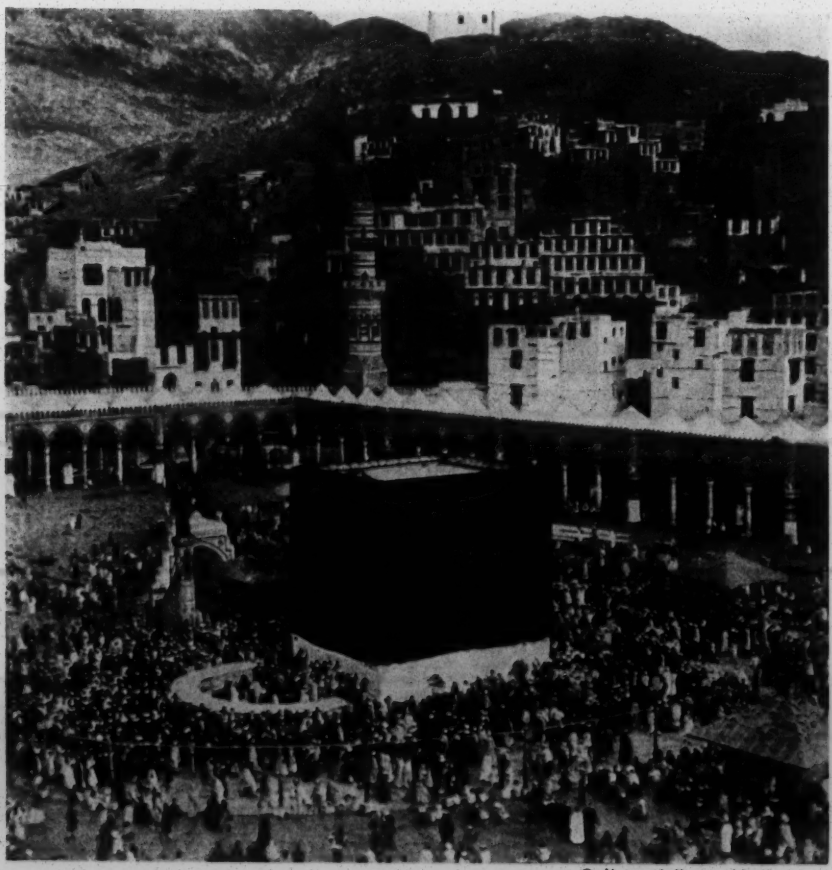
Argentina: Awakening of Argentina and Chile, The: Progress in the Lands that Lie Below Capricorn. By Bailey Willis. Vol. XXX, pp. 121-142, 14 ills., Aug. 1916. 50c.

Isle of Pines, The. Vol. XVII, pp. 105-108, 2 ills., Feb., 1906. 75c.

Climate might be termed the chief asset of the Isle of Pines, for it makes possible its principal industries of early fruit and vegetable culture. In the tropics, but continually blown upon by the trade winds, its temperature is neither hot nor cool. The thermometer seldom registers higher than 80° or lower than 60°. In such a temperature grapefruit and lemons and pineapples grow to perfection, and thousands of acres of them have been set out by American plantation owners.

The Isle of Pines is governed as a part of the province of Havana on the Cuban mainland 40 miles to the north. The municipal officials, judges, and rural guards are all Cubans. But they carry on most of their business in English; for most of their tax-payers and citizens hail from such places as Miami, Norfolk, and Boston, and points West.

Bulletin No. 5, March 26, 1923.



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THE HUB OF THE MOSLEM UNIVERSE, THE SACRED KA'ABA AT MECCA

The Ka'aba stands in the center of the sacred mosque, Mesjid el Haram. The colonnades which surround it are used for housing pilgrims. All the streets of the city slope toward this House of God (Beit Allah).